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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,310	10/03/2003	Anthony Constantine Thermos	839-1487	9481
7590 11/30/2004				
Lowe Hauptman Gilman & Berner LLP				
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Alexandria, VA 22314				
EXAMINER				
PICKARD, ALISON K				
ART UNIT		PAPER NUMBER		
3676				

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/677,310

Applicant(s)

THERMOS ET AL.

Examiner

Alison K. Pickard

Art Unit

3676

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply is specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Turnquist (6,308,958).

Turnquist discloses a brush seal comprising an arcuate brush seal segment 28 including a base having a flange 38 and a plurality of bristles. The seal is received in a groove 30 in a mounting structure 16 having a hook 36. At least a pair of threaded apertures 44 extends through the structure and open into the groove. Screws 46 are threaded into the apertures to engage the base and maintain the flange in engagement with the hook. The screws are staked to the mounting structure (col. 5, line 66).

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turnquist in view of Unsworth (6,494,657).

Turnquist does not disclose a screw and wire insert. Unsworth teaches an improved fastening means comprising a screw 4 and wire insert 1. Unsworth teaches that the screw and insert maintain a strong connection and are set in place. It would have been obvious for one of ordinary skill in the art at the time the invention was made to use the fastening means taught by Unsworth to provide an excellent connection that is locked in place.

5. Claims 8, 9, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' Admitted Prior art (spec. page 1, paragraph 0002) in view of Turnquist.

Applicants disclose a known turbine seal arrangement comprising an inner barrel or diaphragm, rotor, brush seal, groove, arcuate base, and groove. However, Applicants do not disclose the apertures, pins, and securing means. Turnquist teaches a turbine seal assembly comprising an arcuate brush seal in a groove. Turnquist teaches securing the seal within the groove by using apertures and pins/screws. The base of the seal has a flange that is engaged by the screws so that the flange is held in contact with a hook in the mounting structure (i.e. barrel or diaphragm). Turnquist teaches that this allows the brush seal to be mounted in a desired position and prevents floating of the seal within the groove. therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the prior art by using the securing means taught by Turnquist to effectively mount the seal and prevent floating.

6. Claims 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' Admitted Prior Art in view of Turnquist as applied to claims 8 and 11 above, and further in view of Unsworth.

Turnquist does not disclose a screw and wire insert. Unsworth teaches an improved fastening means comprising a screw 4 and wire insert 1. Unsworth teaches that the screw and insert maintain a strong connection and are set in place. It would have been obvious for one of ordinary skill in the art at the time the invention was made to use the fastening means taught by Unsworth to provide an excellent connection that is locked in place.


*Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alison K. Pickard whose telephone number is 703-305-0882. The examiner can normally be reached on M-F (10-7:30), with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Alison K. Pickard  
Primary Examiner  
Art Unit 3676